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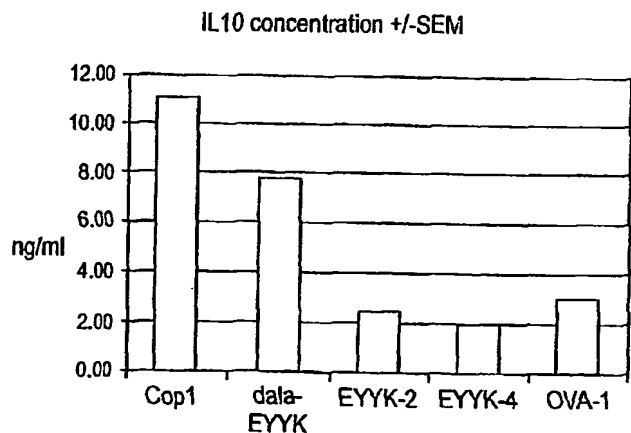
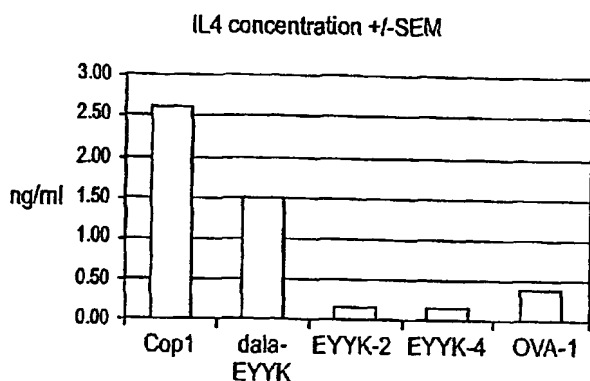
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(54) Title: TREATMENT OF DEMYELINATING AUTOIMMUNE DISEASE WITH MODIFIED ORDERED PEPTIDES



(57) Abstract: Compositions and methods are provided for the treatment of demyelinating autoimmune disease. Therapeutic doses are administered of a combination of therapeutic ordered peptides or one or more modified therapeutic ordered peptide(s) comprising amino acids representing a consensus sequence of a protein identified as a target of the autoimmune T and B cell response. Of particular interest are therapeutic ordered peptides of the target proteins in multiple sclerosis, for example the myelin proteins MBP, MOG, PLP, MAG and cyclic nucleotide phosphodiesterase. The therapeutic ordered peptide may consist only of the ordered repeats, or may be extended at either termini by the addition of other D- or L- amino acid residues. For therapy, the therapeutic ordered peptides may be administered topically or parenterally, by injection at a particular site, including subcutaneously, intraperitoneally, intravascularly, or the like or transdermally, as by electrotransport. The subject methods are used for prophylactic or therapeutic purposes. The compositions of the invention may also contain other therapeutically active agents, immunomodulators, immunosuppressants,  $\beta$ -interferon, steroids, statins etc.

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